

## **REMARKS/ARGUMENTS**

Applicant thanks the Examiner for a thorough and timely examination.

### **I. Status of Claims**

Claims 1-12 are currently pending in the application. This Amendment amends claims 1, 7 and 11, and addresses each point of rejection raised by the Examiner.

The Applicant traverses the Examiner's rejections with detailed arguments below. Favorable reconsideration is respectfully requested.

### **II. Rejections of the Claims under 35 U.S.C. §102(e)**

Claims 1-12 have been rejected under 35 U.S.C. §102(e) as being anticipated by Christiansen (US 2004/0001218). Applicant respectfully traverses this rejection.

"[A]n invention is anticipated if the same device, including all the claim limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, arranged as in the claim. The identical invention must be shown in as complete detail as is contained in the patent claim." MPEP § 2131.

Accordingly, Applicant respectfully requests reconsideration of the rejection because Christiansen does not disclose, suggest, or anticipate each and every feature of the claims. In particular, starting with independent claim 1, the claim recites:

a computer interface to receive the customer emulation which is defined by a customer and a predetermined printing command signal from an external computer;

a printer memory to store at least one pre-stored fixed emulation and the received customer emulation; and

a printer control unit to determine an emulation mode of the printing command signal, and if it is determined to be a customer emulation mode, to generate an image based on the customer emulation stored in the printer memory;

wherein the customer emulation comprises instructions for executing the customer emulation defined by the customer, wherein the instructions are mapped to at least one fixed emulator function; and

wherein the customer emulation mode executes a function command based on the fixed emulation.

Applicant respectfully disagrees that Christiansen anticipates claim 1 and points out fundamental differences between an exemplary embodiment of the Applicant's invention and the cited art. Namely, an exemplary embodiment of the Applicant's invention enables the use of multiple "customized" consumer generated emulations or printing languages that correspond to a fixed (printer understood) emulation to be parsed by a singular parser for communication with a printer. In other words, the Applicant's embodiment comprises steps for "customizing" an emulation prior to any parsing performed by the parser. Christiansen, on the other hand, is silent with regard to any emulation steps and instead is directed to customizing a parser for parsing an emulation. The Applicant is customizing emulation language that is parsed

prior to printing, and Christiansen is customizing how the language is parsed into print data to be printed.

Specifically with regard to the claim language, Christiansen fails to anticipate a customer emulation defined by a customer wherein the customer emulation mode executes a function command based on the fixed emulation. Christiansen is instead directed to a method of enabling a customizable parser. It is stated in the Office Action that the Examiner “perceives the parser 250 to be a fixed emulation, and the loadable parser 240 to be equivalent to applicants customer emulation.” The Applicant respectfully disagrees with this reasoning and interpretation of Christiansen. It is understood in the art and further described in the Applicant’s specification [0009] that an emulation is commonly synonymous with a printing language. The printer emulation or language describes the type of encoding that a computer system uses to transmit print data to a printer and if the computer does not transmit the data in a language or emulation that the printer understands, then the print job is indecipherable. A parser, on the other hand, analyses the emulation language and transforms it to a form more suitable for further processing by the printer. A customer emulation is a “language”, a parser translates the language. Thus, they cannot be perceived as being the same. Further, the customer emulation is formed with a relationship to a fixed emulation that is understood by a parser and a printer. Upon receipt of a customer emulation mode of a printing command signal, the printing control unit enables the customer emulation mode to execute a function command based on the predetermined relationship with the fixed emulation. Therefore, various consumer emulations may be parsed by a fixed parser for communication with a

printer. Even if the Examiner's interpretation of the parser as the emulation were reasonable, the customer parser in Christiansen does not execute a command based on a fixed parser. The customer parser of Christiansen does not comprise instructions mapped to a "fixed parser". Alternatively, the parser in Christiansen is programmed to be independently fully functional and does not execute commands based on any other parser. The primary difference is that the Applicant's exemplary embodiment enables a variety of customer languages to communicate to a singular parser for the printing of an image, whereas Christiansen enables a singular language to be custom translated by a "customer" parser wherein the parser effects the printing of various customizable images corresponding to the custom translation. The "customer" loadable parser of Christiansen is capable of changing parsing of fixed image data which affects the output of the image data, whereas the Applicant's exemplary embodiment enables a user to select and change the type of input data.

An advantage of the Applicant's exemplary embodiments of the invention is summarized in paragraph [0006] such that a printer application developer need not understand the fixed emulation specification to write a printing program. The exemplary embodiments of the present invention provide the developer with a customer emulation generating program that maps/coordinates a customer chosen/developed emulation to the fixed emulation. The fixed emulation or language is usually predetermined and is one that the printer understands so as to enable the printing of image/data as discussed above. Thus, the Applicant's exemplary embodiment enables a customer program/application to effectively transmit understandable image data to the printing system without having to understand the

specific fixed language/emulation used to communicate to the printer. Essentially, the exemplary embodiment provides the user with the means to generate a new printing language. Christiansen, on the other hand, requires one to be extremely knowledgeable of the specific emulation specification and parser operations in order to generate a customizable loadable parser to effect a custom output of data. In Christiansen it is impossible to customize or add data to the fixed input image data. The user must know the format of the fixed input in detail in order to enable the loadable parser. The parser is basically the means to partially modify the analysis of the input data of the predefined fixed language. However, the exemplary embodiment of the Applicant's invention provides the means by which the user defines the input type and input content according to his or her preferences.

To further illustrate an example, the Applicant will consider the fixed emulation to be PCL as described in paragraphs [0009] and [00012] wherein the customer emulation may be generated by the specifications/limitations of the customer. The customer is unknowledgeable of how to communicate print data to the printer according to PCL, so the customer utilizes his/her own language or some chosen language. An exemplary embodiment of the invention provides that the customer emulation is generated with the help of an emulation generating program to map the customer emulation to a set of functions that correspond to the fixed PCL emulation. The customer emulation and the fixed emulation are stored in the printer memory and upon determining that the received print command is in customer emulation mode, then a parser in the printer parses the customer emulation command using the mapped corresponding command function of the fixed emulation and

subsequently executes the mapped command (see [00029] of the specification). The mapped command is based on the fixed emulation so that the printer can effectively understand and print image data regardless of the initial customer emulation.

Christiansen is directed to an entirely different method. Christiansen enables a customized loadable parser to specify/modify print functions of a single printing language or emulation. Christiansen requires an emulation that is compatible with a parser and **then** at the customized parser effects a customized output. If the customer emulation of the Applicant's exemplary embodiments were presented to the parser in Christiansen, the parser would be unable to intelligently translate the emulation to decipherable printing language. An example embodiment described in Christiansen (see [0085]) describes a method that accepts presumably two identical print command strings specified by an understood emulation at the parser and printer. Depending on the chosen customized loaded parser, the output image will vary. The customizable parsers are generated to modify the input commands to desired formal parsed print commands in order to output the customer's preferences in the image. Christiansen is completely silent with regard to any discussion of enabling different customer emulations for transmitting image print data. Christiansen is solely directed to customized parsers for effecting change in output image data. An exemplary embodiment of the Applicant's invention provides various "non-fixed" languages and language support devices, whereas Christiansen partially alters parsing of a "fixed" language.

Again, the Applicant's exemplary embodiments of the invention are specific to enabling a customer emulation, not a parser. A customer emulation is necessarily

distinct from a customizable parser, and in light of the Applicant's specification and arguments above **cannot** be perceived as being the same. Therefore, at the least Christiansen fails to anticipate a printer control unit to determine an emulation mode wherein a customer emulation mode executes a function command based on a fixed emulation.

For at least the foregoing reasons, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claim 1 under 35 U.S.C. § 102(e). Claim 7 recites similar subject matter as that in claim 1 and is therefore distinguished from Christiansen for reasons similar to those given above with respect to claim 1. Dependent claims 2-6 and 8-12 are patentable on their own merits yet are distinguished from Christiansen at least for the reasons given above by virtue of their dependence on independent claims 1 and 7, respectively.

Response filed May 23, 2008  
Responding to Office Action mailed January 24, 2008  
App. Ser. No. 10/731,483

## **CONCLUSION**

Applicant submits that such arguments are fully responsive to the Office Action dated January 24, 2008 and respectfully requests the asserted grounds of rejections be withdrawn based on such arguments.

In view of the above, it is believed that the above-identified application is in condition for allowance, and notice to that effect is respectfully requested. Should the Examiner have any questions, the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

  
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Dated: MAY 23, 2008